Title: WIRELESS INFRARED NETWORK TRANSCEIVER AND METHODS AND SYSTEMS FOR OPERATING SAME

Amendments to the Claims

Please cancel claims 1-44.

1.-44. (Canceled)

S

r ...

percie

is as

45. (Previously Presented) A method of aligning first and second communicating transceivers in a network of existing point-to-point communications transceivers, comprising the steps of:

monitoring the signal quality of a digital signal transmitted by said second transceiver and received by said first transceiver;

if the signal quality of the digital signal received by said first transceiver falls below a predetermined threshold, then

with said second transceiver stationary, tracking said first transceiver over a predetermined number of positions in a first predetermined path to determine one or more positions of maximum signal quality detected by said first transceiver in said first predetermined path,

if a single position of maximum signal quality is detected by said first receiver in said first predetermined path, then returning said first transceiver to said single position of maximum signal quality detected by said first transceiver in said first predetermined path, and

if two positions of maximum signal quality are detected by said first receiver in said first predetermined path, then returning said first transceiver to the center between said two positions of maximum signal quality detected by said first transceiver in said first predetermined path.

- 46. (Previously Presented) The method of claim 45 wherein said signal quality of said digital signal is determined as a function of an error rate determined by the first transceiver.
- 47. (Previously Presented) The method of claim 46 wherein the error rate is determined to a seventy-five percent confidence interval.

Çı,

- 48. (Previously Presented) The method of claim 46 wherein the digital signal includes a plurality of first signal packets each of approximately 1440 bytes and a plurality of second signal packets each of approximately 64 bytes.
- 49. (Previously Presented) The method of claim 48 wherein each of the plurality of first and second packets includes a sequential counter.
- 50. (Previously Presented) The method of claim 45 wherein said first predetermined path is selected from the group comprising a vertical path, a horizontal path and a diagonal path.
- (Previously Presented) The method of claim 50 wherein said method of aligning first and second communicating transceivers in a network of existing point-to-point communications transceivers is repeated for a second predetermined path selected from the group comprising a vertical path, a horizontal path and a diagonal path.
- 52. (Previously Presented) The method of claim 45 wherein said method of aligning first and second communicating transceivers in a network of existing point-to-point communications transceivers is repeated for said first predetermined path.
- 53. (Previously Presented) The method of claim 45 wherein said digital signal is transmitted on an infrared beam.
- 54. (Previously Presented) The method of claim 53 wherein said method of aligning first and second communicating transceivers in a network of existing point-to-point communications transceivers is repeated for said first predetermined path a predetermined number of times based on a spot size of the infrared beam.
- 55. (Previously Presented) The method of claim 45 wherein said method of aligning first and second communicating transceivers in a network of existing point-to-point communications

5. 140

v. rt.

Silv.

.

5%

II. i. .

Opt.

Maria.

Inode.

Title: WIRELESS INFRARED NETWORK TRANSCEIVER AND METHODS AND SYSTEMS FOR OPERATING SAME

transceivers is repeated periodically, the timing based on the quality of the digital signal received by the first transceiver.

56. (Previously Presented) A system for aligning first and second communicating transceivers in a network of existing point-to-point communications transceivers, comprising:

a processor;

a memory connected to said processor and storing instructions for controlling the operation of the processor, the processor operative with the instructions to perform the steps of:

monitoring the signal quality of a digital signal transmitted by said second transceiver and received by said first transceiver;

if the signal quality of the digital signal received by said first transceiver falls below a predetermined threshold, then

with said second transceiver stationary, tracking said first transceiver over a predetermined trained number of positions in a first predetermined path to determine one or more positions of the transceiver in said first predetermined path,

if a single position of maximum signal quality is detected by said first receiver in said first predetermined path, then returning said first transceiver to said single position of maximum signal quality detected by said first transceiver in said first predetermined path, and

if two positions of maximum signal quality are detected by said first receiver in said first predetermined path, then returning said first transceiver to the center between said two positions of maximum signal quality detected by said first transceiver in said first predetermined path.

- 57. (Previously Presented) The system of claim 56 wherein said signal quality of said digital signal is determined as a function of an error rate determined by the first transceiver.
- 58. (Previously Presented) The system of claim 57 wherein the error rate is determined to a seventy-five percent confidence interval.

Serial Number: Unknown Filing Date: Herewith

Title: WIRELESS INFRARED NETWORK TRANSCEIVER AND METHODS AND SYSTEMS FOR OPERATING SAME

- 59. (Previously Presented) The system of claim 57 wherein the digital signal includes a plurality of first signal packets each of approximately 1440 bytes and a plurality of second signal packets each of approximately 64 bytes.
- 60. (Previously Presented) The system of claim 59 wherein each of the plurality of first and second packets includes a sequential counter.
- 61. (Previously Presented) The system of claim 56 wherein said first predetermined path is selected from the group comprising a vertical path, a horizontal path and a diagonal path.
- 62. (Previously Presented) The system of claim 61 wherein said method of aligning first and second communicating transceivers in a network of existing point-to-point communications transceivers is repeated for a second predetermined path selected from the group comprising a vertical path, a horizontal path and a diagonal path.
- 63. (Previously Presented) The system of claim 56 wherein said method of aligning first and second communicating transceivers in a network of existing point-to-point communications from transceivers is repeated for said first predetermined path.
- 64. (Previously Presented) The system of claim 56 wherein said digital signal is transmitted on an infrared beam.
- 65. (Previously Presented) The system of claim 64 wherein said method of aligning first and second communicating transceivers in a network of existing point-to-point communications transceivers is repeated for said first predetermined path a predetermined number of times based on a spot size of the infrared beam.
- 66. (Previously Presented) The system of claim 56 wherein said method of aligning first and second communicating transceivers in a network of existing point-to-point communications transceivers is repeated periodically, the timing based on the quality of the digital signal received

8. . . .

. . .

Sections

Sc. ...

I e ... Lit- . . .

byth

67.

irans .

drans.

better.

William

131

hulikii

11.

Serial Number: Unknown Filing Date: Herewith

Title: WIRELESS INFRARED NETWORK TRANSCEIVER AND METHODS AND SYSTEMS FOR OPERATING SAME

by the first transceiver.

67. (Previously Presented) A system for aligning first and second communicating transceivers in a network of existing point-to-point communications transceivers, comprising: means for monitoring the signal quality of a digital signal transmitted by said second transceiver and received by said first transceiver;

means for, if the signal quality of the digital signal received by said first transceiver falls below a predetermined threshold,

with said second transceiver stationary, tracking said first transceiver over a predetermined number of positions in a first predetermined path to determine one or more positions of maximum signal quality detected by said first transceiver in said first predetermined path,

if a single position of maximum signal quality is detected by said first receiver in said first predetermined path, then returning said first transceiver to said single position of maximum signal quality detected by said first transceiver in said first predetermined path, and

if two positions of maximum signal quality are detected by said first receiver in said first predetermined path, then returning said first transceiver to the center between said two positions of maximum signal quality detected by said first transceiver in said first predetermined path.